

## VV&A TWG Minutes of 7 February 1996

### 1. TWG attendance:

Priscilla Glasow, DMSO Rep  
Ray Miller, Air Force Rep  
Larry Cantwell  
Jim Sikora  
David Reed  
Dr. Dale Pace  
Simone Youngblood

William Dunn, Army Rep  
Dr. Paul Muessig  
Dr. Russ Richards  
Gary Coe  
Dr. Ernie Page  
Dr. Osman Balci  
Susan Solick

### 2. The following were also in attendance:

Mike Borowski  
Dale Atkinson  
Marti Hoppus

Al Piesco  
David Hall

3. Priscilla Glasow convened the meeting in the absence of Dr. Sanders. The first agenda topic was a presentation by the VV&A Technical Support Team on the work which they have been doing to define a generic VV&A process. Three different models were presented, representing the current state of the Tech Team's discussions. These models displayed the highest level of detail only, and require decomposition to provide greater detail.

a. Dr. Osman Balci led off with his vision of a high level model of the Modeling and Simulation Life Cycle. There was objection to the form of the model due to its similarity to the software engineering "waterfall" model. Discussion centered on using what was considered by some TWG members as an obsolete model, to represent VV&A procedures. It was noted that the first impression created by the waterfall model could be negative and not present the recommended practices in the best light. The group reached consensus that any resemblance to the waterfall model should be eliminated. There was no disagreement, however, about the content of Dr. Balci's model.

b. Mr. Jim Sikora followed with his diagram for VV&A. Following a left to right flow process, it covered the three basic phases of requirements, development, and application. The group accepted the model form and content with little discussion.

c. Ms. Susan Solick provided the greatest detail with her IDEF0 activity model. The model showed three generations of activities and the relationships between inputs, constraints, outputs and mechanisms inherent using the IDEF technique. Again there was little discussion concerning specifics of the model.

d. Summary discussion centered on the degree to which the M&S life cycle should be included in the VV&A process. It was determined that VV&A cannot exist in

isolation and must have connections to the life cycle. Additional discussion centered on HLA and the incorporation of HLA considerations and specifics in the VV&A process. This issue is a continuing action for the VV&A Tech Team and will become an integral part of the Recommended Practices Guide. Final discussion included the need to adapt any models produced to reflect the generic nature of the VV&A process that the Guide is attempting to capture.

4. The second agenda item was the TWG's nomination of candidate programs to participate in the VV&A Assessment Team (VAT). The VAT's task will be to assess the VV&A Recommended Practices Guide from the perspective of the program manager. Sixteen programs had been nominated by the Services. No response was received from the Navy or the Joint Staff prior to the TWG meeting. Mrs. Glasow divided the TWG into four smaller work groups and each assessed four of the nominated programs against the dimensions which defined the potential program space (Service, functional area, model type, level of current VV&A effort, level of model development). The groups also binned the programs according to the level of modeling (system, engagement, mission, campaign). Each work group briefed the larger group on the results of the binning process, identifying those programs which were not appropriate for VAT consideration and specifying new programs or applications of nominated VV&A processes for consideration. The four work group leaders then incorporated their results into a summary chart, which was formulated by Dr. Paul Muessig to provide a clear visual display of the mapping process. The TWG then finalized its list of ten programs for recommendation to DMSO for VAT selection (Attachment 1). It should be noted that Attachment 1 reflects the best estimate which the TWG members could provide as to the appropriate binning of the programs into the given dimensions. The programs are NOT listed in any order of priority. Other programs considered included RF TEAM, AFOTEC's SAL process, PEGEM, J-MASS, and SIIRCM. Dr. Sanders will review the list and may make additional recommendations.

5. In closing remarks, an invitation was extended to the VV&A TWG to attend the VV&C TWG meeting scheduled for 29 February. The next meeting of the VV&A TWG is tentatively scheduled for the week of 25 March. Additional information will be provided at a later date.